

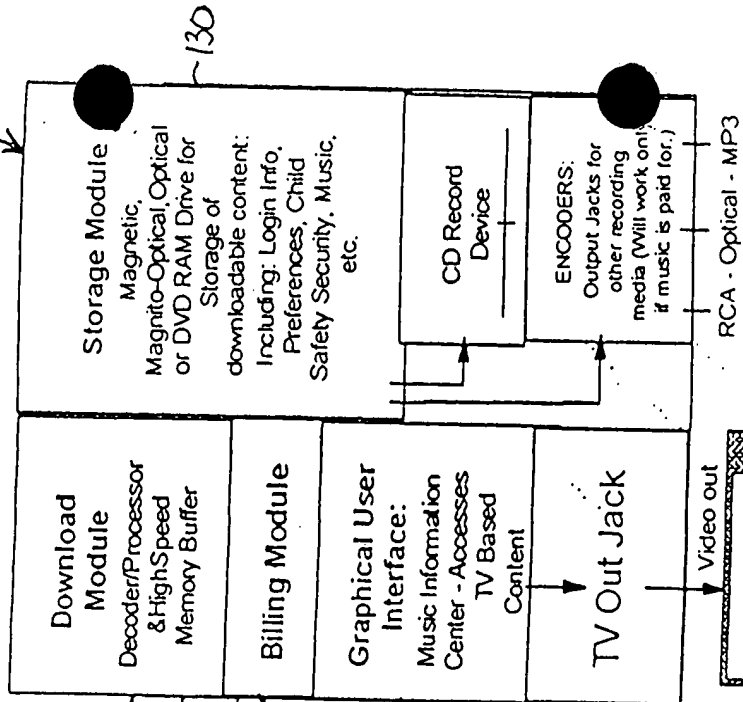
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10

Digital Music & Program/Pricing Information

Digital Music & Program/Pricing Information

28



100



Music/Data Content Distribution

30



120

140

Phone line

Central Controller

- ▷ Content Scheduling/Encoding
- ▷ Customer Database
- ▷ Customer Billing
- ▷ Content Provider Payment

Price, Listings, and other Info

Music Content Provider

SYSTEM OPERATOR'S INTERNET SITE

Music Listings, Pricing, Features, Chat Rooms, Top Listings, Ads, Specials, & New Listings

Internet

FIG. 1

Step	Mode Name	Description	Hardware Involved
1	Selection	Customer looks at recently updated "catalog" of available music selections on his TV using the graphical user interface. Use remote to page through information.	User station, remote, customer TV, stored catalog
2	Ordering	Customer uses user station, remote and TV screen to order standard or customized CD. Order communicated to central controller by Internet or modem. Central controller issues decoding and encryption key(s), selection locations and order number to user station for preview.	User station, modem/Internet, remote, customer TV
3	Downloading	Music selections are downloaded during early morning transmission hours as encrypted, compressed files through customer's satellite dish and receiver to hard disk in user station. User station selects correct TV channel on receiver using IR link.	User station, satellite receiver, video output interface
4	Decoding	User station uses decoding key(s) to decode downloaded file(s) so that full quality music is on disk drive (or other storage medium) in user station. Customer order number is hidden within this music based upon encryption information received during ordering process.	User station
5	Previewing	Brief portions of downloaded selections may be "previewed" by the customer along with the entire selection that has been "hobbled" by removing information to degrade music quality and prevent reconstruction of music.	User station, remote, customer's amp, speakers and TV
6	Playing	Customer plays full-quality selection through his hi-fi or TV sound system with post billing back his account via later modem/Internet communication with the central controller. Playing may include graphics, written jacket information, or hearing impaired cues shown on customer's TV.	User station, remote, customer's amp, speakers and TV
7	CD Delivery	Full-quality CD that can be heard on any CD player is burned with order number (ID tag) hidden in the music. (Burning process does not need to be quick.)	User station, CD burner, customer supplied CD
	Account Setup	Happens when customer buys and hooks up the user station.	

Fig. 2

FIG. 3 is a block diagram of a system for distributing digital music and program/pricing information.

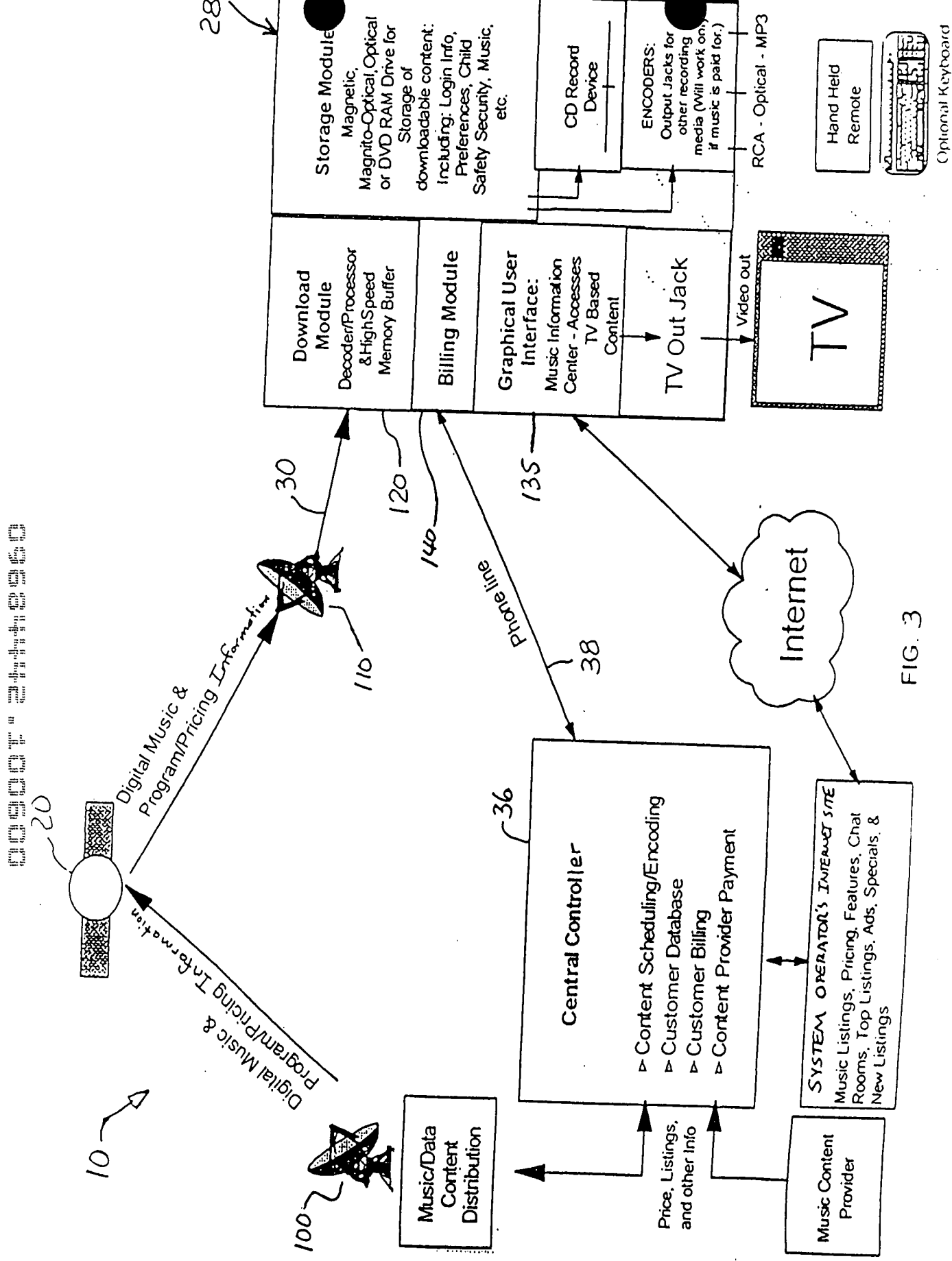


FIG. 3

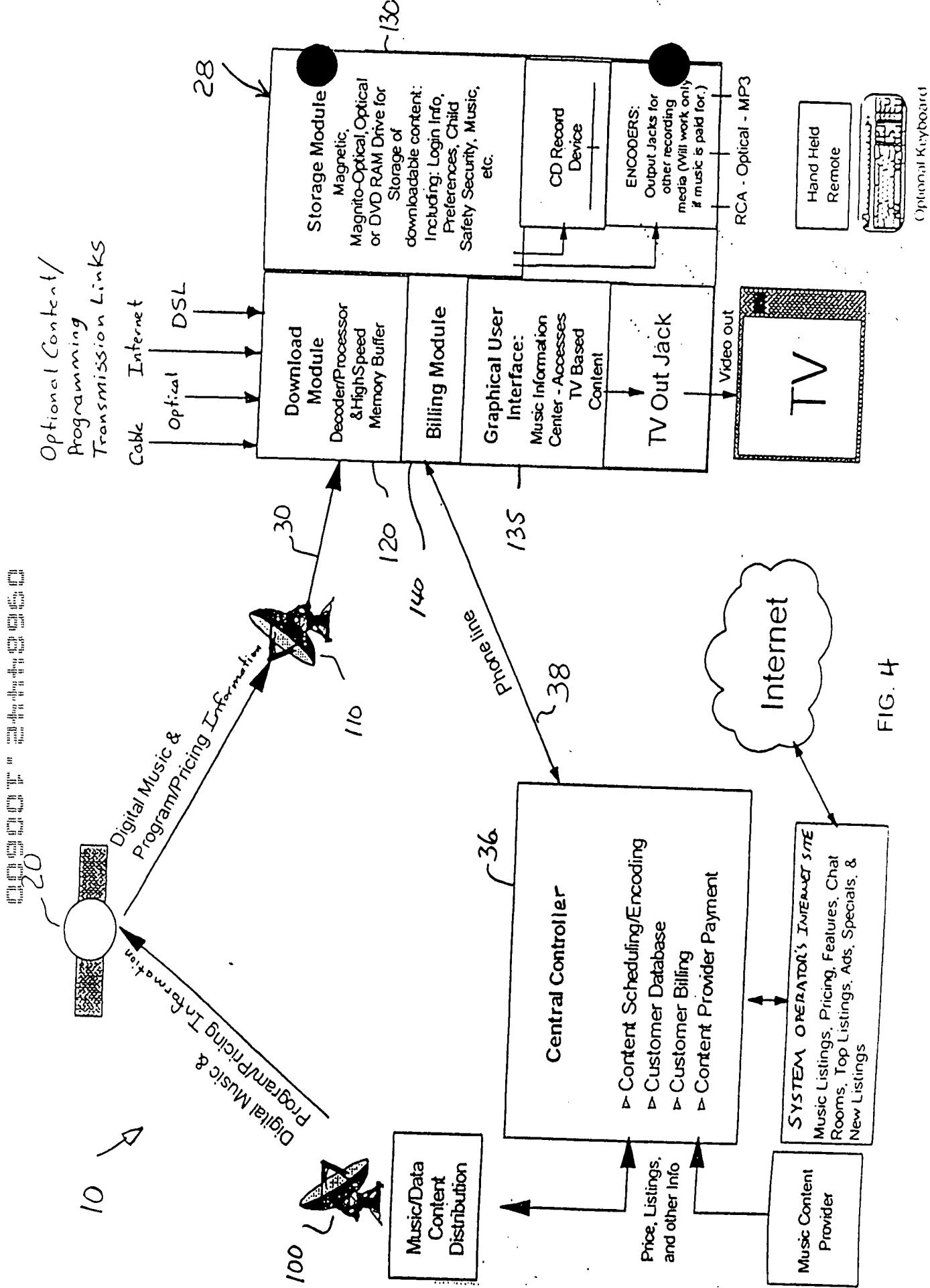


FIG. 4

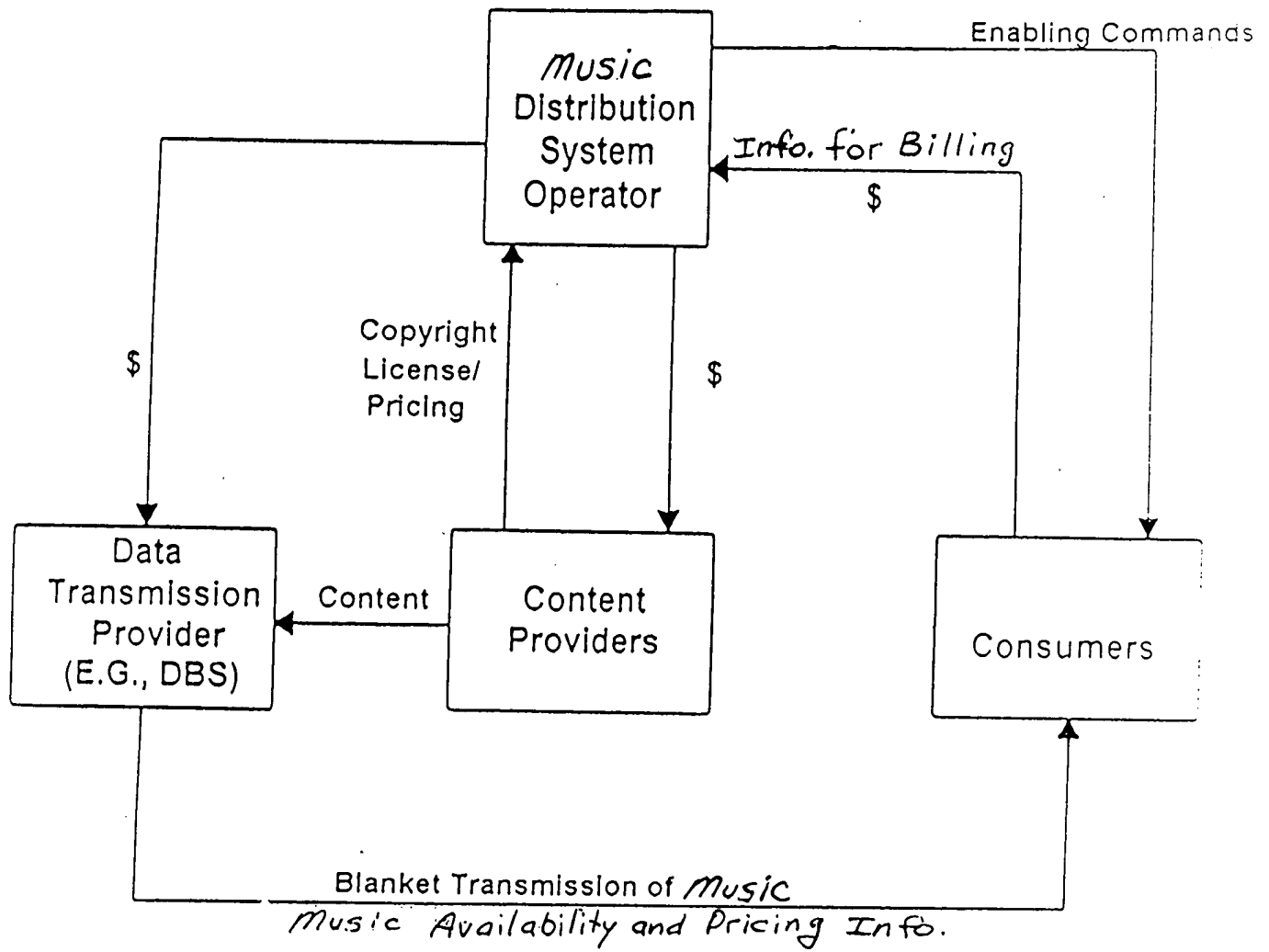


FIG. 5

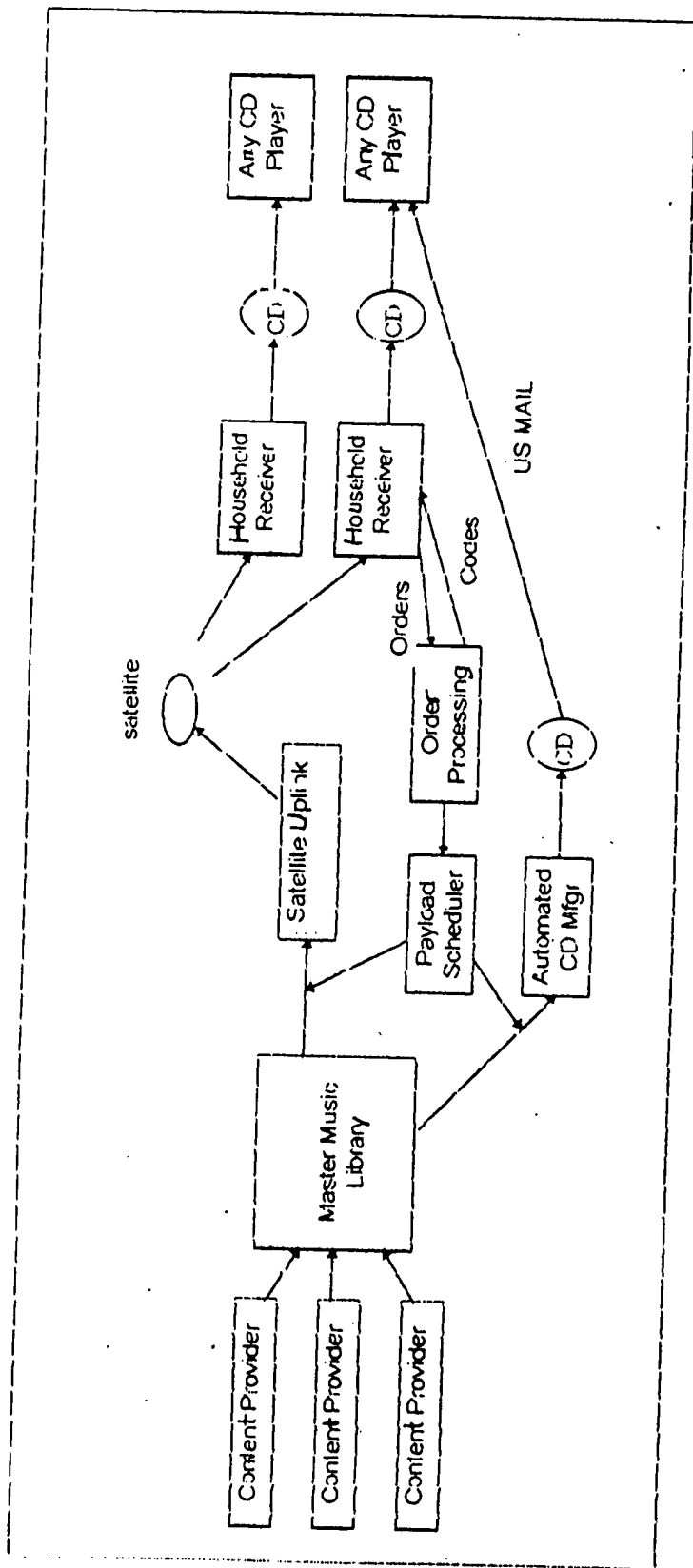
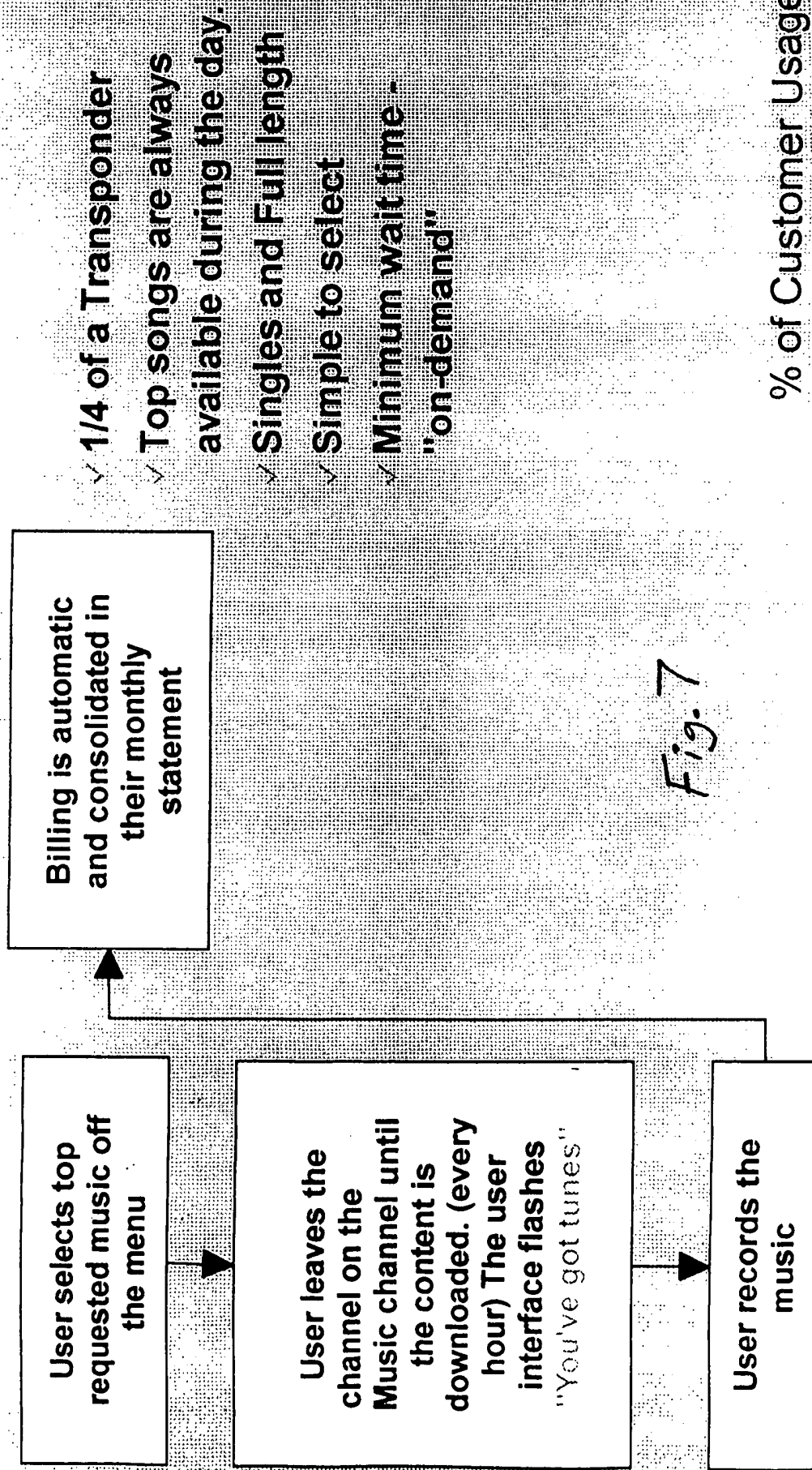
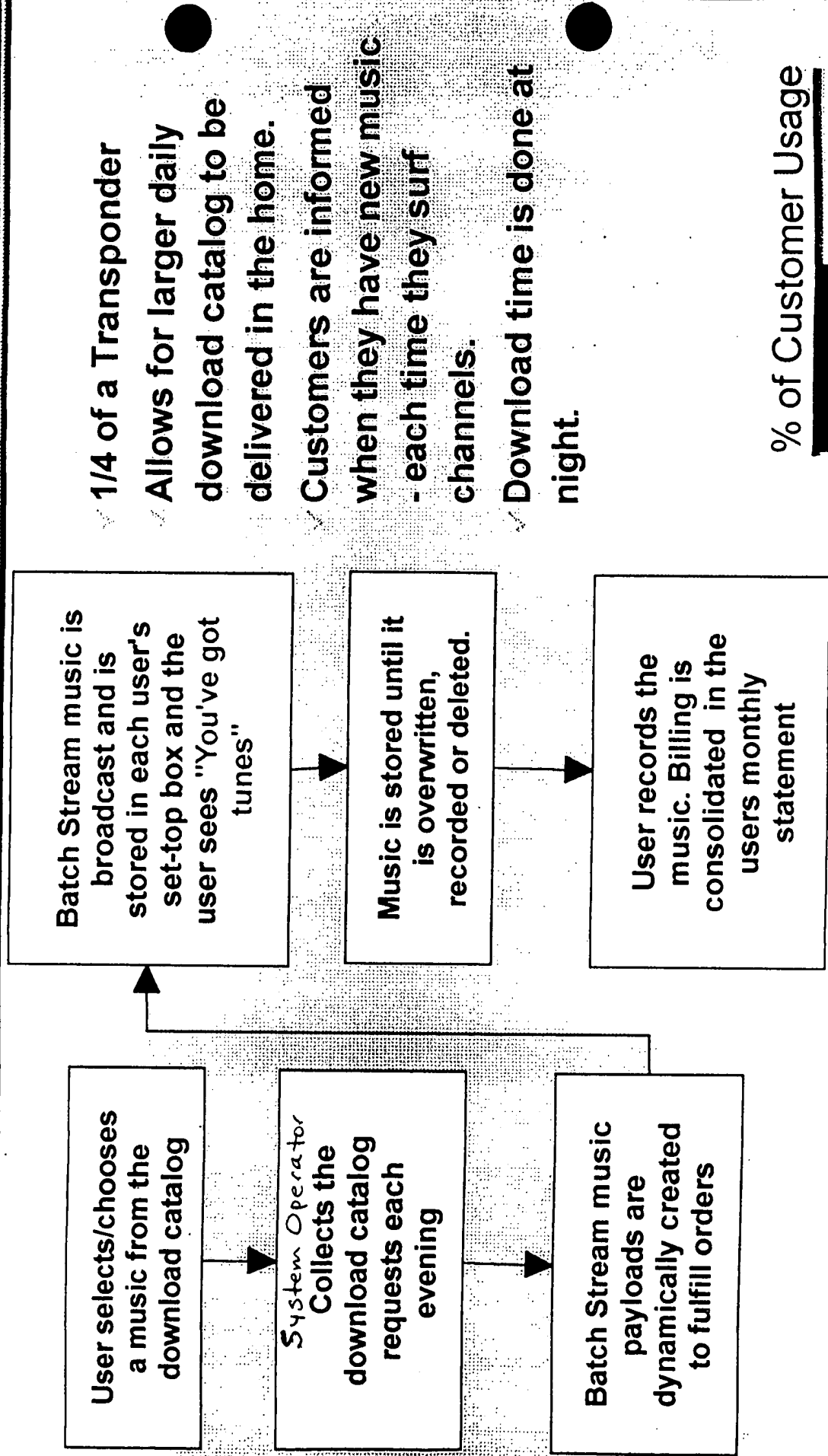


Fig. 6

TOP REQUESTED MUSIC Streaming During the Day



FULLFILLING ORDERS BY Batch Stream at Night



- ✓ 1/4 of a Transponder
- ✓ Allows for larger daily download catalog to be delivered in the home.
- ✓ Customers are informed when they have new music - each time they surf channels.
- ✓ Download time is done at night.

% of Customer Usage

Percent of Catalog

Fig. 8

Select Music Style Preferences

Alternative

Blues

Books & Spoken

Children's Music

Christian &

Gospel

Classical

Country

Comedy

Dance & DJ

Easy Listening

Electronic

Folk

Hip Hop/Rap

International

Jazz

Latin

Metal

New Age

Opera & Vocal

Pop & Rock

R&B/Soul

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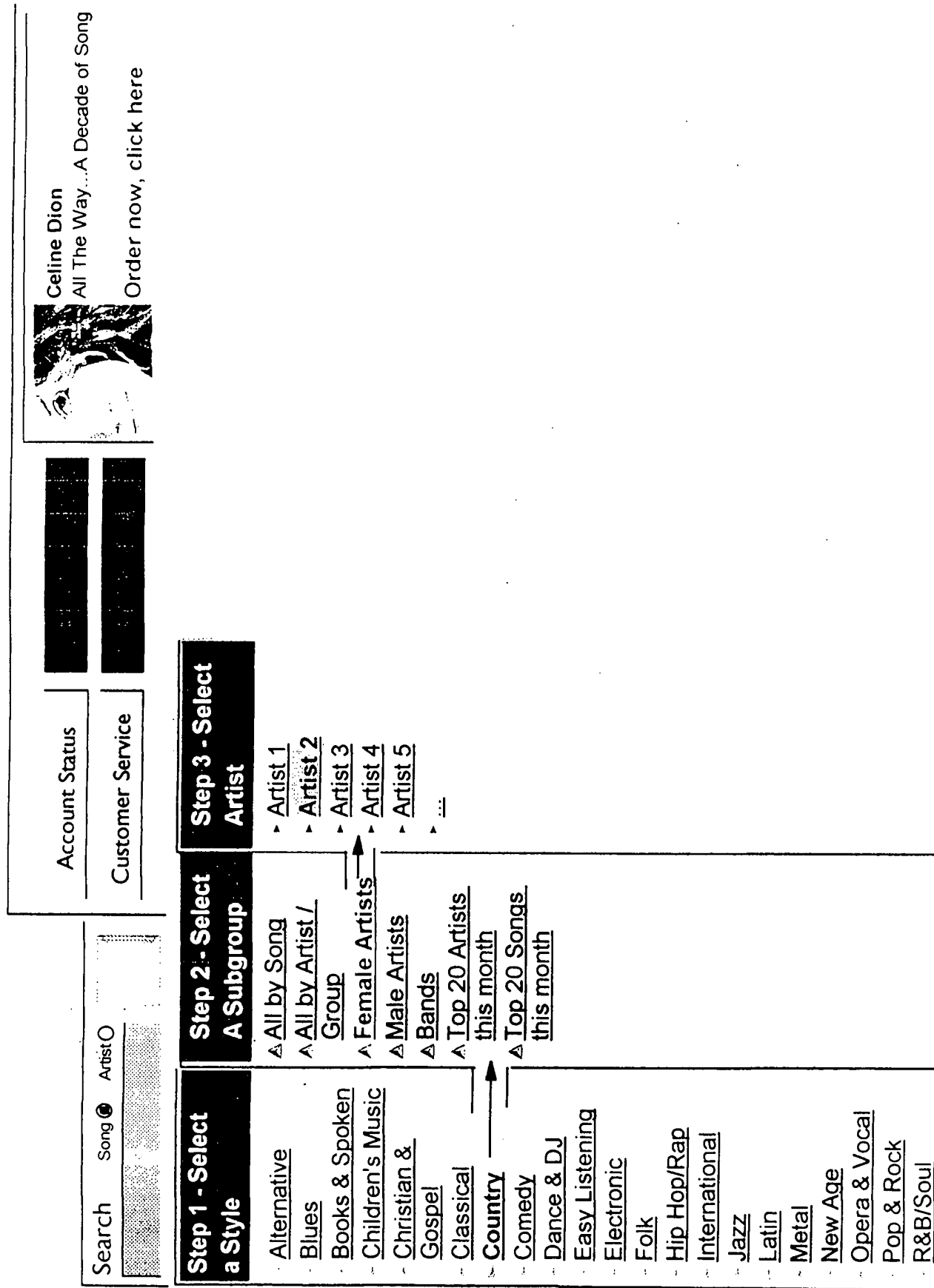


Fig. 10

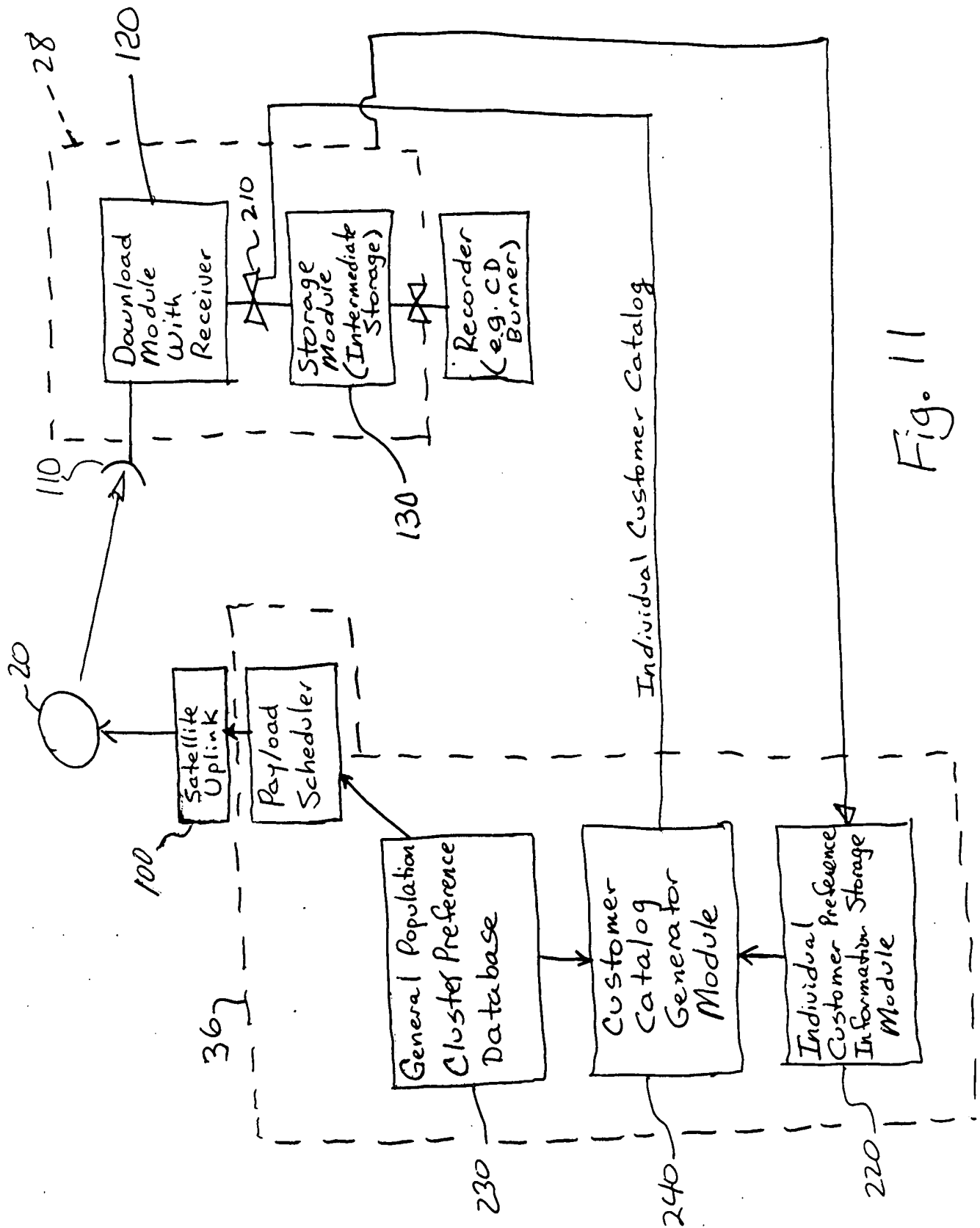


Fig. 11

Profile-based Streaming

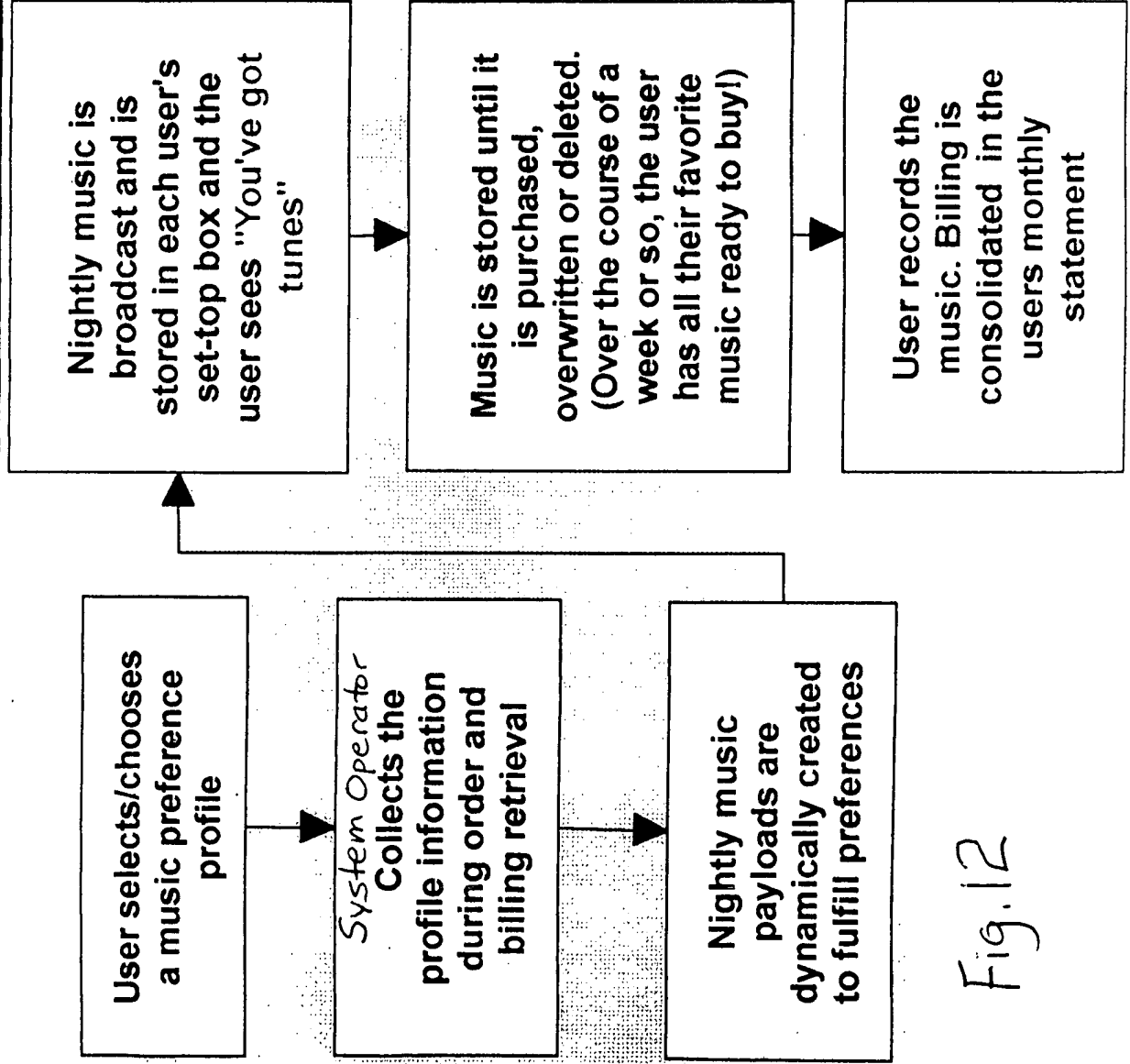


Fig. 12

1/4 of a Transponder

Each customer has their favorite music available all the time.

Customers are informed when they have NEW music - each time they surf channels.

Download time is instantaneous

Profiles selected at all levels: (New releases, Genre, Artist, Group, etc.)

% of Customer Usage

Percent of Catalog

Promotion-based Streaming

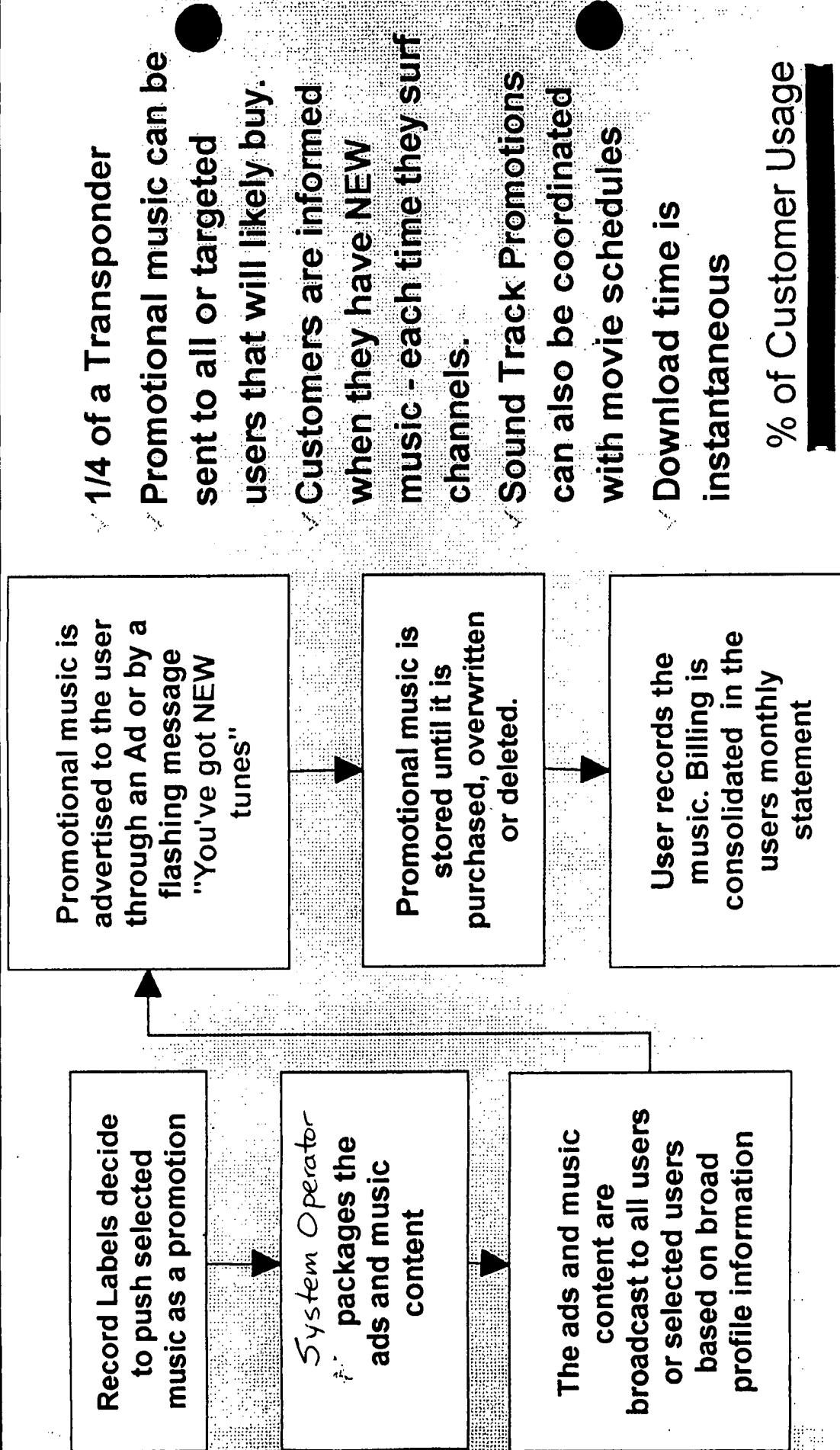


Fig. 13

Quick-Ship Overnight

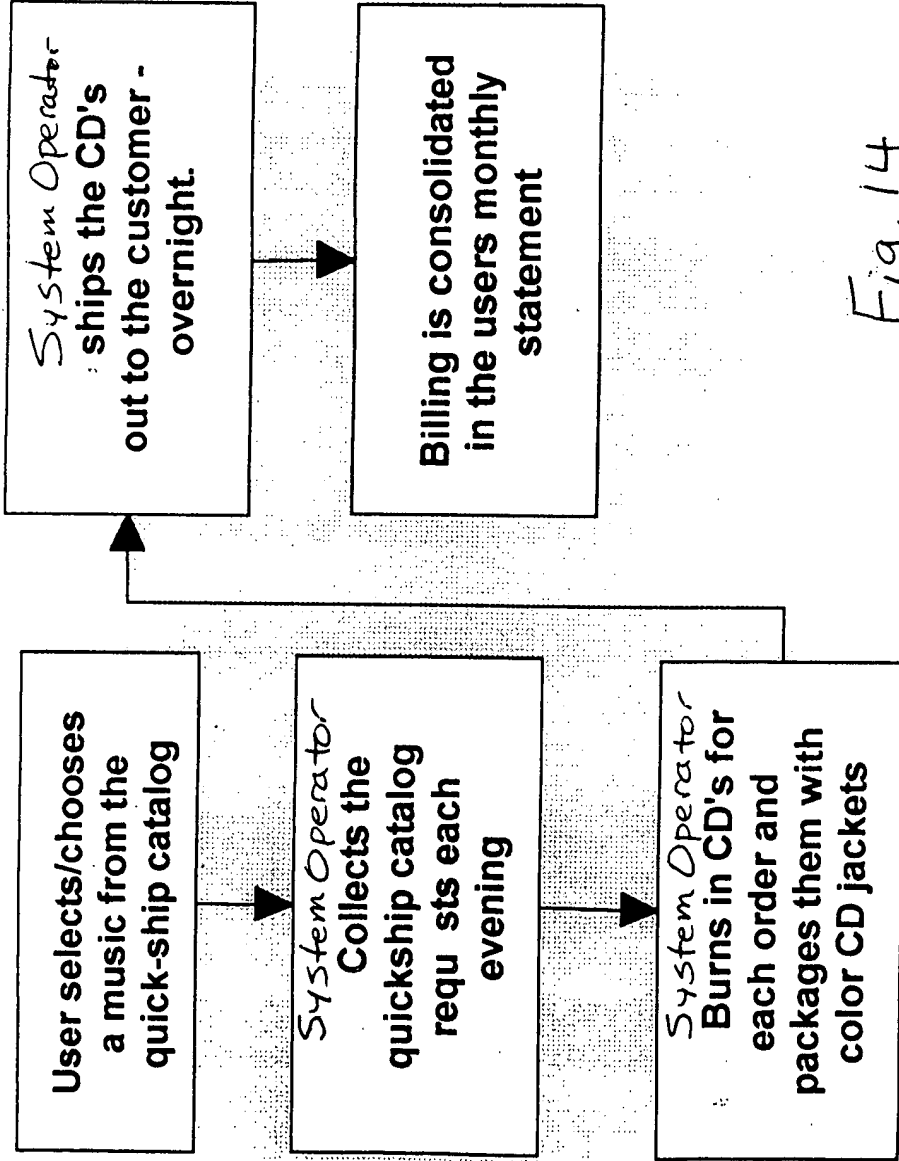


Fig. 14

- ✓ No bandwidth required
- ✓ Allows for full music catalog - millions of songs
- ✓ Customers get a personalized CD the next day.
- ✓ Consolidated billing

% of Customer Usage

Percent of Catalog

	Customers w/o CD Burner	Customers with CD Burner
Steaming during the day (Top releases from download catalog)		✓
Batch stream at night (All ordered releases from download catalog)		✓
Profile based stream at night (Releases from full library "Quick-ship" catalog)		✓
Promotion based Stream (Promotional music pushed by Record Label)		✓
Quick-ship overnight (Full library catalog)	✓	✓

Fig. 15